

# Work Order ID 51524

August 25, 2009 1:35:08 PM



Item ID: D2576-1

Accept



Setup Start



Revision ID: G

Stop



Item Name: Step (casting detail)

Start Date: 8/31/09 Start Qty: 50.00



Cust Item ID:

Required Date: 9/18/09 Req'd Qty: 50.00



Customer:

Reference:

Approvals:

Process Plan:

*RL*

Date:

*09-8-25*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2576

Rev G

100

0.00



PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 10260 Ship D2576 mould to vendor Cast per D2576-I  
Pattern vendor: Alpine Non- Ferrous Material Release Note Required

*CL 09/08/26 (50)*

110

Receive & Inspect for Damage & Mat'l Certs

0.00



Packaging

Memo

0.00

Packaging

Ensure D2576 mould is returned with the ordered parts Ensure release note is attached

*CL 9/4/16 (50)*

120

QC6- Inspect dimensions to drawing

0.00



QC

Memo

0.00

Quality Control

*2) 8/21/17*

*counted (50) ✓*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 51524

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Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

Identify as per dwg & Stock Location:

0.00



Packaging

Memo

0.00

Packaging

*machining*

*CL 09/09/21 50*

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*09/09/21*

*MF 09-09-21*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

# Picklist Print

August 25, 2009 1:35:08 PM

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Work Order ID: 51524

Parent Item: D2576-1RevG

Parent Item Name: Step (casting detail)

Comments:



Start Date: 8/31/09

Required Date: 9/18/09

Start Qty: 50.00

Required Qty: 50.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2576-1PRevG		Purchased	No			100	Each	0.0000	50.0000			
Step (Casting Detail)												

Per 8/3/10 (50)

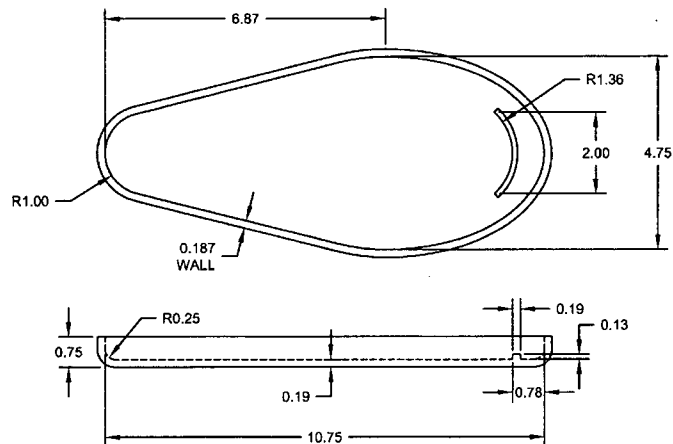
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

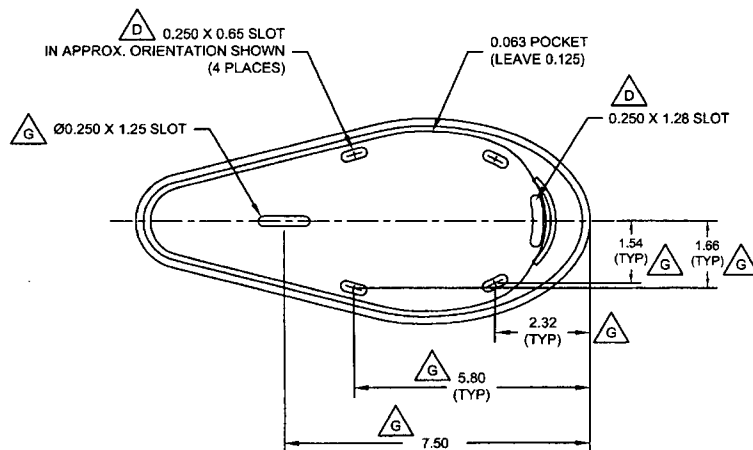
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D2576-1 CASTING**



**D2576-3 MACHINING DETAIL**  
(MAKE FROM D2576-1)

**NOTES:**

- 1) MATERIAL: CAST ALUMINUM ALLOY A-535.2
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.025 TO 0.050 MAX
- 6) IDENTIFICATION: NONE

51524

**RELEASED**

07.08.29

G	- CHANGE SLOTS LOCATION AND SIZE ON D2576-3 - DUE TO SKID BENDING PROGRAM CHANGES - UPDATE CNC PROGRAM	MB	07.08.15
F	7.05 WAS 6.61	PH	07.04.17
E	CHANGE 0.50 HOLE LOCATION AND ADD NOTE	RF	99.09.07
D	CHANGE SLOT SIZE AND LOCATION (TSR A1069)	CP	99.08.18
C	ADD POCKETS AND SLOTS FOR WELDING	DS	98.08.18
B	REMOVE POCKETS, ADD HOLE	DS	96.11.28
A	NEW ISSUE	DS	96.09.18
REV.	DESCRIPTION	BY	DATE
DESIGN	4	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	3		
CHECKED	PH	DRAWING NO.	REV. G
MFG. APPR.	24	D2576	SHEET 1 OF 1
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	STEP	1:3
DATE	07.08.15	COPYRIGHT © 1995 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

**ALPINE NON-FERROUS FOUNDRY**8657-132ND STREET  
SURREY, B.C. V3W 4P1**WORK ORDER**

Tel: (604) 596-8080

Fax: (604) 596-8045

**Sold To:** DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
CANADA**Ship To:** DART AEROSPACE

Order Date		Purchase Order#	Due Date	Ship Via		Page
26-Aug-09		PO10260	15-Sep-09	FEDEX		1
Item#	Item Code	Description	Material	Ordered	B/O	Qty SI
1 2	DART D2576	D2576 STEP CSTG  <i>S 21/01/17</i>		50		50

**Comments**

Castings&amp;Patterns are property of Alpine until paid in full

*Attn. Shantal***CERTIFICATE OF ANALYSIS**

CUSTOM ALLOY LIGHT METALS  
13329 ECTOR STREET CITY OF INDUSTRY, CA 91746  
PH# (626) 369-3641 FAX# (626) 369-2471

**CUSTOMER:**

RYPAC ALUMINUM  
11849 TANNERY ROAD  
SURREY BRITISH COLUMBIA,

SHIP DATE **FEB 10 2009**

CONFORMS TO ASTM SPECIFICATION: B179-06

Alloy: 535.2

Heat: A8388

*Sorlos 17*

Si	0.066
Fe	0.095
Cu	0.003
Mn	0.169
Mg	7.080
Cr	0.001
Zn	0.015
Ti	0.198
Sn	0.007
Pb	0.001
Ni	0.004
OET	< .15
Sr	0.000
Al	REMAINDER

Si	.10
Fe	.10
Cu	.05
Mn	.10-.25
Mg	6.6-7.5
Cr	
Zn	.05
Ti	.10-.25
Sn	
Pb	
Ni	
OET	.15
Sr	
Al	REMAINDER

BE .004

BE .003-.007

ELEMENTS LISTED WITHOUT A RANGE, UNDER THE REQUIRED SPECIFICATIONS, ARE MAXIMUM ALLOWABLE PERCENTAGES. SAMPLES ANALYZED ON AN OPTICAL EMISSION SPECTROMETER WITH CURRENT CALIBRATION STATUS. STANDARDS ARE NIST OR ARE TRACEABLE TO NIST.

*Ron Zakrzewski*

RON ZAKRZEWSKI

**FEB 10 2009**

DATE

LAB MANAGER

PM-12.01 Rev D 12/5/2001

WARNING: THE BUYER IS ADVISED THAT THIS METAL MAY CONTAIN CREVICES AND HIDDEN RECESSES HOLDING ENTRAPPED MOISTURE. THE METAL SHOULD BE HANDLED AND PROCESSED WITH THIS POSSIBILITY IN MIND. ENTRAPPED MOISTURE MAY CAUSE AN EXPLOSION IF THE METAL IS INTRODUCED INTO A MELTING FURNACE WITHOUT PROPER DRYING.



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO10260**

Purchase Order Date 8/26/09

PO Print Date 8/26/09

Page Number 1 of 1

Order From :

VC-ALP001

ALPINE NON-FERROUS FOUNDRY  
8657 - 132ND STREET  
SURREY, BC V3W 4P1  
CA



Contact Name

Buyer

Chantal Lavoie

Vendor Phone

604 596 8080

Requisition Nbr

Vendor Fax

604 596 8045

Tax Resale Nbr

10127-2607

Vendor Account Nbr

Terms

Net 30

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2576-1P G	Step (Casting Detail)	9/15/09 Yes	50.00 Each	FedEx Economy	\$17.7500	\$887.50

Special Inst:

AS PER DWG D2576 REV. G  
B51524  
MATERIAL: CAST ALUMINUM ALLOY  
A-535.2 BREAK ALL SHARP EDGES:  
0.025 TO 0.050 MAX

PO Total:

\$887.50

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 8/26/09

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable